

WT 96-198
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National Council on Disability
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June 30, 1998

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JUN 30 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of Implementation of Section 255 of the Telecommunications Act of 1996,
WT Docket No. 96-198, "Access to Telecommunications Services, Telecommunications
Equipment, and Customer Premises Equipment by Persons with Disabilities"

INTRODUCTION

On behalf of the National Council on Disability (NCD), I am pleased to submit these comments in response to the accessibility regulations proposed by the Federal Communications Commission (FCC) under the Telecommunications Act of 1996. NCD is an independent federal agency with a fifteen member board appointed by the President and confirmed by the U.S. Senate. Our mandate is to advise Congress and the Administration on public policy affecting America's 54 million people with disabilities.

NCD developed these comments with guidance from a federal advisory council called Tech Watch: a cross-disability task force of NCD which regularly convenes a dozen leaders on technology and disability policy from around the country. NCD's Tech Watch monitors technological developments for accessibility, facilitates communications between industry representatives and consumer leaders with disabilities, and makes recommendations to our board on ways of promoting access to the information superhighway.

NCD appreciates the FCC's consideration of this input. On balance, we believe the FCC has done a good job in its implementation of Section 255 of the Telecommunications Act of 1996. We do believe, however, that the Commission has interpreted a number of the section's key provisions more narrowly than Congress intended. Particularly in such areas as the small scope of telecommunications services to be covered by the Act, the complexity of factors to be used in determining what is readily achievable, and the erosion of the Access Board's guidelines under the law, we fear the Commission has taken an approach that may well frustrate the intentions of the Act and that may render Section 255 ineffectual as America's legal mechanism for ensuring the human rights of people with disabilities in the digital age.

In the following comments we make detailed recommendations regarding approaches we believe the Commission should adopt. Appreciating as we do the Commission's willingness to receive and evaluate feedback on many of these issues, we are confident that many of the necessary improvements can be implemented.

COMMENT 1 (re NPRM paras. 24-28)

NCD strongly supports the FCC's determination that it possesses legal authority to promulgate regulations to implement Section 255 of the Telecommunications Act of 1996. We believe that the authorities cited by the Commission in support of this authority (e.g., NPRM at nn. 45-54) are more than ample to establish its jurisdiction.

Given that the Commission possesses discretionary authority to promulgate these regulations, an equally fundamental question must be asked. Is doing so a wise and prudent exercise of FCC authority? We wholly concur with the Commission in the belief that it is. We recognize that there will be occasions, as discussed below, in which NCD disagrees with conclusions the Commission has tentatively reached on various points of procedure and substance. Precisely for that reason, we also wish to emphasize our awareness of the many unprecedented difficulties faced by the Commission in attempting to come to terms with Sec. 255. We recognize that people of good faith can differ, often vigorously, but we are fully mindful of the deliberative process, disciplined analysis and principled conclusions that are the hallmarks of the Commission's efforts in this area.

COMMENT 2 (re NPRM paras. 29-30)

The Commission seeks comment upon its approach to the Access Board accessibility guidelines for telecommunications equipment and customer premises equipment (CPE). The Commission proposes to use the Access Board's equipment guidelines as a "starting point" for its work, and to accord the Access Board's guidelines "substantial weight" in the promulgation of the Commission's regulations.

Much hinges upon interpretation of the words "in conjunction with" as used in subsection e of Sec. 255. While we agree that these words do not amount to a mandate for the Commission to adopt the Board's guidelines (indeed, to read them that way would be to deny the FCC the plenary jurisdiction that the statute clearly vests in it), we do recommend that the Commission reassess the overall approach it has taken to the Access Board guidelines. We believe that the approach taken by this NPRM--namely, that of adopting some portions of the Access Board guidelines explicitly, appearing to adopt some others by implication, rejecting some explicitly, rejecting some by implication, and leaving uncertain the status of still others--will ultimately serve to create confusion and uncertainty, and to undermine the very goals of efficiency and order that the Commission seeks to achieve by adopting Sec. 255 regulations.

Accordingly, we recommend that the Commission exercise its discretion in favor of adoption of the Access Board guidelines in their entirety. As the Commission itself notes, these guidelines grew out of the broad-based, consultative, consensus-building process of the Telecommunications Access Advisory Committee (the TAAC). Although the 61 individuals

and groups who responded to the Commission's September, 1996 Notice of Inquiry may represent a larger number of people than were included on the TAAC, the TAAC process represents an unequaled microcosm. Through the TAAC's meetings, its draft and re-draft documents, and its final consensus report, the various interests and stake holders involved with Sec. 255 were given (and took) an extraordinary opportunity to work-out consensus solutions embodying balanced responses to the major issues surrounding equipment accessibility.

Though narrower in scope than the TAAC report (see NPRM n21), the Access Board guidelines do not depart from the TAAC report in material respects (see NPRM nn26 and 29). Therefore, the Access Board guidelines, like the consensus report on which they are based, represent the product of a thorough, no-holds-barred thrashing out of the issues by leading representatives of all the major stake holders. Accordingly, we believe that the Commission would be responsive to the best thinking of all stake holders were it to adopt the guidelines as written, supplementing them where necessary in connection with "telecommunications services," "enforcement" and other matters that were not within the TAAC's jurisdiction.

Although we acknowledge that there is no direct support either in the statute or in the legislative history for any mandate that the Commission formally adopt the Access Board guidelines into regulations, it is worth noting that in adopting Sec. 255 Congress frequently referred to the Americans with Disabilities Act (ADA) as a precedent for many definitions and provisions. It may be that the absence of explicit statutory guidance on the meaning of the words "in conjunction with" reflects an unstated assumption that the ADA would inform implementation of Sec. 255, no less than it pervaded the content, of the law.

It will be recalled that with only one or two very small additions and modifications, the Department of Justice (DOJ) adopted the Access Board's ADA guidelines. Although DOJ was under no obligation to adopt the Access Board's guidelines, it is clear that Congress was aware of the smooth process that had attended development and implementation of ADA Titles II and III regulations.

That Congress highly approved of this process is indicated by the expanded role it gave the Access Board under the Telecommunications Act. In this connection, the FCC notes (NPRM n14) that the Access Board was given no role in telecommunications under Title IV of the ADA. It is that fact which makes Congress' decision to expand the Access Board's role into telecommunications here especially noteworthy. Furthermore, Congress declined to offer detailed instructions to the collaborating agencies here regarding how their joint efforts to implement Sec. 255 should be coordinated. Surely, this omission by Congress indicates a high degree of satisfaction with the process that had followed enactment of the ADA, and an expectation on its part that much the same process would unfold here.

Short of adopting the Access Board guidelines in their entirety, we believe that the Commission's proposed approach to them is overly vague and indefinite. Thus, even if the

Commission decides to retain its tentative approach described in para. 30 of the NPRM, there is much it could do to avoid unnecessary confusion, and to prevent unproductive parsing and comparing of its and the Access Board's often parallel language. At the very least, the Commission should explicitly adopt or reject each provision in the Access Board's guidelines. Short of this, the Commission should implement a rule of construction for those portions of the Access Board guidelines that the NPRM does not expressly address. Under this approach The Commission would rule that, unless a provision of the Access Board guidelines has been specifically discussed in the NPRM, such provision shall not be deemed to represent Commission thinking. Or, alternatively, the Commission might indicate in its rule of construction that portions of the Access Board guidelines not specifically addressed in the NPRM are entitled to weight and attention, either for the analytical principles they use or for the conclusions they reach. We believe that industry, consumers, and the Commission's own enforcement processes would benefit from the added clarity that would result from greater precision regarding the role and the standing of the Access Board's guidelines.

COMMENT 3 (re paras. 31-34)

We fully agree with the Commission's conclusion that Sec. 255(f) authorizes administrative complaints against both equipment manufacturers and service providers for alleged violation of Sec. 255. It would defy logic, not to mention the plain meaning of the statute, to imagine that Congress would give the Commission "exclusive jurisdiction" over complaints arising under Sec. 255 if no complaints were to be permitted.

We also strongly support the Commission's interpretation of the relationship between Sections 207-208 and Sec. 255. Secs. 207 and 208 provide a number of remedies, including the award of monetary damages, against alleged violations of law by "common carriers." In concluding that Sec. 255 does not curtail or supersede the remedies previously established under Secs. 207-208, the Commission's analysis is wholly in accord with congressional intent and with the clear language of the statute.

But the impact of this interpretation may depend on the degree of overlap between "common carriers" and "telecommunications service providers." In light of the fact that the statute offers no definition of "telecommunications service provider" (NPRM para. 44), questions are likely to arise concerning what are the situations or activities in which the status of telecommunications service provider and the status of common carrier overlap. It would be extremely valuable if the Commission could elaborate on exactly when an entity providing covered telecommunications services is, by dint of providing such services, also functioning as a common carrier, or when the activities of common carriers also amount to the provision of telecommunications services. Once this is explained more fully, the scope of the Sec. 207 and 208 remedies can be better assessed. If the Commission believes that these two statuses will rarely overlap, or that complaints against service providers under Sec. 255 will rarely suffice to trigger liability under Secs. 207 or 208, the damages remedy provided by these two

sections may be an illusory one. If, on the other hand, the Commission believes that such dual jurisdiction will be fairly frequent, the risk of being held liable for damages may be a significant one for at least some of the entities covered by Sec. 255. We believe that the latter interpretation is appropriate; we therefore recommend that the Commission incorporate language in its final rule reflecting this interpretation and making clear that a complaint against a telecommunications services provider under Sec. 255 can and will give rise to the award of damages under Secs. 207-208 if the service at issue falls within the scope of common-carrier activities.

One other element of the Commission's analysis here requires clarification. The Commission asserts its exclusive jurisdiction (NPRM para. 34) over all complaints arising under Sec. 255, including those brought under Secs. 207 and 208. But the Commission should also make clear whether there could exist any situations in which accessibility concerns could give rise to complaints under Secs. 207 and 208 without reference to Sec. 255. That is, could a failure to provide access ever be a violation of common carrier rules, independent of Sec. 255? If so, would the Commission assert exclusive jurisdiction over such complaints, or would litigants be free in the Commission's view to seek redress in Federal court?

COMMENT 4 (re paras. 36-43)

The Commission sets forth a detailed explanation for the distinction it makes between those "telecommunications services" and "adjunct-to-basic" services that it regards as covered by Sec. 255[©] of the Act, and those "enhanced" telecommunications services or "information" services that it believes not to be subject to the accessibility requirements of the law. It asks for comment (para. 42) on these distinctions, and in particular asks commenters whether in view of the broad objectives underlying Sec. 255, Congress intended Sec. 255 to apply to a "broader range of services."

NCD believes: (a) that Congress did indeed intend and expect that the array of services covered by the accessibility requirements of Sec. 255[©] would be broader than those the Commission has thus far deemed itself able to include.

NCD further believes: (b) that even if the standards used by the FCC in its application of the law do correctly reflect congressional intent, the Commission has nevertheless applied these legal standards in a manner that is far more restrictive than even the narrowest interpretation of congressional intent could support.

Third, NCD believes: [©] that regardless of specific congressional intent in this regard, Congress has vested the Commission with considerable discretion over the key definitions, which the Commission has already exercised on numerous occasions, and which it has the legal authority to exercise again on behalf of access here.

Finally, NCD believes: (d) that with so much of the functionality of telecommunications equipment migrating to the Net, the Commission must develop a process for ongoing and periodic review of which telecommunications services are necessary for meaningful access.

Before proceeding with this analysis, we wish to note appreciatively the Commission's indication (NPRM para. 43) that its definitions of the key terms relating to telecommunications service continue under examination and active review. In this connection, we are especially heartened by the Commission's care in noting that nothing in this proceeding is intended to "foreclose any aspect of that ongoing reexamination." We hope that what follows will contribute to that ongoing process.

SUBCOMMENT (a) CONGRESSIONAL INTENT

Sec. 255 is properly viewed as a civil rights law. The history of and the debates over the provision make this clear. It may at first seem strange for the FCC to be put in the position of implementing a civil rights statute, but in fact such responsibility is not novel. (See e.g., NPRM para. 159.) Title IV of the ADA is also regarded by many as a civil rights law. Moreover the Commission is obliged, in the performance of its work and the discharge of its responsibilities to adhere to a variety of federal civil rights requirements, including the ADA and Sec. 504 of the Federal Rehabilitation Act, in its hiring, public communications, and supervision of broadcast licensees.

It is an axiom of statutory construction that civil rights laws are to be construed liberally. That is to say, such laws are to be interpreted as broadly as reasonably possible in favor of the rights sought to be created or protected. We believe the Commission can and should apply this principle to its application of Sec. 255(c).

We recognize that some may question how such a broad and general principle can be applied to the dense technicalities of the Communications Act. Faced with such uncertainties, it is important to note the existence of additional grounds for concluding Congress intended coverage of services to be broader than what the Commission has tentatively proposed. To clarify this further point about congressional intent, we must understand the overall context of the Telecommunications Act. The Act was designed to liberate and empower the competitive and innovative force of the nation's telecommunications industry. It is abundantly clear that Congress, like the supporters of the Act outside of Congress, expected a steady stream of new and exciting telecommunications services to enter the market in the wake of deregulation and reform.

Many new services have indeed come into the telecommunications market, and innovation has become the rule. But given the definitions of "basic," "adjunct-to-basic" and "information" services that the Commission has proposed, it seems probable that most of the innovative new services will fall on the "information" or "enhanced" services side of the line.

In other words, these innovative telecommunications services will not be subject to the accessibility requirements of the law.

Is it plausible to think that Congress would have gone to all the trouble of passing Sec. 255, if it did not intend for Americans with disabilities to share in our nation's exciting and imminent telecommunications future? Put another way, is it credible to think that Congress would have thrashed out subsection c solely for the purpose of allowing people with disabilities to share only in America's telecommunications past? We simply do not believe, cannot believe, that this is so.

A final issue regarding congressional intent relates to the services the Commission has classified as adjunct-to-basic. Access to many of the services in this group is already protected by other laws, including by other provisions of the Telecommunications Act itself (e.g. sec. 225 and 710), by Title IV of the ADA, and potentially by a number of other laws (e.g. Secd. 508 of the Federal Rehabilitation Act and state human rights laws). Relatively few of the services characterized by the Commission as adjunct are clearly exempt from coverage under some other law. Few if any of the services classified as adjunct have been introduced to the marketplace since passage of the Telecommunications Act. So far as is known, they all predate it. What's more, even without regard to the law, virtually all the services classified by the Commission as covered under Sec. 255 were already accessible at the time the Telecommunications Act was passed. Why would Congress feel the need to mandate the accessibility of services that already were accessible?

This being so, the question once more becomes inescapable: If subsection c does no more than largely duplicate existing protections, or than guarantee access only to fairly routine services that already existed at the time of its enactment, why was it really necessary? And why did people fight about it so?

Para. 41 of the NPRM illustrates this point. There the Commission explains why operator services for the deaf (OSD) are classified as basic or adjunct-to-basic. While this explanation is informative as to the Commission's mode of analysis, it begs the question so far as shedding light on the meaning of subsection c is concerned. After all, the right to OSD is already established by other laws. Thus, in its eagerness to explain the reasoning it used in classifying OSD as a covered telecommunications service, the Commission largely ignores the central question of what if any impact on OSD the new statute was supposed to have. Until and unless we know what the Commission believes subsection c was designed to do, we cannot adequately evaluate the distinctions and classifications it undertakes to make.

This same concern must be expressed with respect to most of the analysis contained in NPRM paras. 36-43. What this part of the NPRM seems to be is a discussion of the Commission's own regulatory history, in which the Commission's Computer II proceeding, as much or more than Sec. 255(c), is the main source of guidance.

But in appearing more concerned with its own thinking than with that of Congress, the Commission may be telling us something of utmost importance. It may be telling us that it believes itself to possess a considerable amount of discretion over the proper classification of various services. As discussed in subcomment c below, we believe that the Commission does possess considerable discretion over the service classifications announced here.

SUBCOMMENT (b) APPLICATION OF THE DEFINITION OF TELECOMMUNICATIONS

Pursuant to Sec. 3(14) of the Act, the NPRM defines telecommunications as: "the transmission, between or among points specified by the user, of information of the user's choosing, without changing the form or content of the information as sent and received" (para. 37).

The Commission has defined as basic, and therefore as covered by Sec. 255(c), those services that are "basic in purpose and facilitate the completion of calls through utilization of basic telephone service facilities." The Commission then goes on to list those services that qualify for coverage based on this standard, noting that such covered services "facilitate the establishment of a transmission path over which a telephone call may be completed, without altering the fundamental character of the telephone service" (NPRM para. 39).

The Commission states that it has consistently characterized a service as subject to Title II regulation (meaning, for our purposes, as covered by Sec. 255(c)), "if the option or feature is clearly basic in purpose and use, and brings maximum benefit to the public through its incorporation in the network" (para. 40).

Based on this standard, one would suppose that those services required for person A to originate, route, and complete a telephone transmission to person B would be covered by the law. But not necessarily so. Instead, accessibility is guaranteed by law only if the mode of transmission is by voice (that is traditional voice telephony) or TTY. But if by chance a and b prefer to communicate the exact same information, over the exact same route, from the same origination point to the same destination point of their choosing, without altering the form or the content of the data, but want to communicate by e-mail, the accessibility provisions of the law do not apply.

This is because electronic mail services, along with such other fast-growing contemporary services as voice mail, facsimile store and forward, interactive voice response, gateway, electronic database and audio-text services, are regarded as "information" services, and as such are outside the protections of Sec. 255.

No one suggests that traditional voice telephone and e-mail communication are technically equivalent. They involve different service providers and intermediaries and different CPE;

they utilize different encoding and decoding protocols, and they have other differences. Equally, no one disputes the existence of a regulatory history in the Commission that gives rise to differences in their treatment and legal status. But none of these differences are the issue here. The issue here is whether, from the standpoint of the "broad objectives" of Sec. 255, an approach that extends protection to the one while denying it to the other can be said to make any sense, or can be viewed as a viable expression of public policy today.

The implications of the Commission's classification system are startling. presumably, no Internet access will be covered by Sec. 255. Nor therefore will services and capabilities like Internet voice telephony, a service already coming into increasing use and often less expensive than conventional long-distance service (para. 38). In fact, it appears that none of the futuristic, cutting-edge or innovative telecommunications services of the next decade are likely to be covered by the law. Ironically, accessibility progress may actually be lost as what appear to be standard voice communications become transmitted exclusively in some areas through cable/Internet telephony rather than traditional phone networks.

The Commission recognizes that "some important and widely used services" fall outside the scope of coverage. But it is not merely because these services are desirable or even important that their exclusion from legal protection should be reassessed. No, such reassessment is dictated by the fact that covered services will steadily shrink, in number and in importance, as a component of the telecommunications milieu, as new, largely uncovered services supplement or replace them. Accordingly, we urge the Commission to take the opportunity of its ongoing review to reconsider the classification system it has developed. And if the Commission determines that it lacks authority to alter what it believes to be an inflexible, legislatively mandated result, then we trust it will join with the disability community and with enlightened service providers in seeking remedial amendments to the law from Congress at the earliest possible moment.

Two other serious problems with the FCC's application of its service classification criteria remain to be discussed. The first relates to the manner in which the Commission has chosen to classify services that technically fall within the definition of information services, but which the Commission has nevertheless elected to classify as adjunct-to-basic. It has treated a number of services in this way, because of their role in facilitating the completion of telephone calls (para. 39). For example, the Commission has thus designated directory assistance as a covered service, because it is necessary to get the number in order to complete a call. By contrast, reverse directory assistance (where you already have the number but need to get the location or name) is considered an information service. Like electronic databases and gateway services, reverse directory services are considered information services because not deemed essential to making or completing a call.

We do not challenge the distinction among services based on their role in facilitating access to the telecommunications system. What we do ask, however, is how the FCC proposes to classify those services that can be used to facilitate access to the

telecommunications system, but that have other potential uses as well. As we read the NPRM, it appears that if a service is designed to provide extra information or capabilities, it will be deemed "informational," even though it also facilitates access.

Directory services and databases may offer standard directory assistance as well as other information. Are they totally exempt from accessibility requirements, or are they required to be accessible to the extent of their directory assistance resources but not in respect to any other services they offer? (Compare NPRM para. 46).

Our final concern in this area relates to what the Commission means by "completion" of a call. Does the Commission intend to ensure that the telecommunications user with a disability can leave a message if their intended party is not available, or is it enough that the phone connection literally be established? We ask this question because of the exclusion of voice mail from coverage. If voice mail is not accessible, many circumstances are foreseeable in which people with disabilities will succeed in reaching the number they are trying to call and be charged for it, but with little prospect of achieving any real communication or of accomplishing the purpose of their call.

SUBCOMMENT © COMMISSION DISCRETION

NCD believes that the FCC possesses ample legal authority to reclassify services. We do not contend that the Commission can or should alter the categories, but we do believe that it has considerable discretion in determining which services go into which category. If the Commission agrees, we urge it to use that authority to reconsider what services are indispensable to meaningful telecommunications access for Americans with disabilities.

We base our views concerning the Commission's authority on three factors. Firstly, the primary controlling precedent for classification appears to be the Commission's Computer II proceeding. That set of rulings and orders, like the subsequent ratifications by Congress of what the Commission had done, were not undertaken with disability or accessibility in mind. To apply them to circumstances, facts and issues that were never considered and to which they are not responsive would be a great mistake.

Even if the Commission believes that its regulatory precedents do govern its classification or other key Sec. 255 decisions, the Commission has the power to reopen those proceedings and amend its rulings if it believes they would otherwise lead to an inappropriate result.

Secondly, we believe the Commission has authority to reclassify various services, because it has essentially said that it does. The NPRM (paras. 38-39) recites how a large number of services were reclassified in 1996. Unless some intervening statute or court decision between then and now has fundamentally altered the Commission's jurisdiction, the same authority which justified the 1996 reclassification could be used again.

In light of the parallel rule making proceedings in which the Commission has been charged by Congress with doing very much the same as we here proposed, the opportunity for thorough rethinking of the service classification issue would seem to be ideal. Needless to say, no one welcomes the uncertainty and delay that would ensue from such a comprehensive reassessment, but the Commission can implement the bulk of its Sec. 255 rules without additional delay, while reserving if necessary its final decision on the precise scope of services to be covered.

Thirdly, we believe that the Commission asserts its authority to reclassify many services through something it says in para. 40 of the NPRM. In explaining when it will reclassify various services from informational to adjunct-to-basic, the Commission states that it will do this when the "option or feature" is "basic in purpose and use," and when it "brings maximum benefit to the public through its incorporation in the network."

We strongly urge that "maximum benefit to the public" would result from incorporation of broader accessibility into the telecommunications network. If the Commission is persuaded as to the "basic purpose and use" of these services, it should be in no doubt about the maximization of public benefit that classifying many more services as basic or adjunct-to-basic would entail.

SUBCOMMENT (d) NEED FOR ONGOING PUBLIC INVOLVEMENT

With the rapid migration of sources of CPE functionality from hardware to software, from the desktop to the Internet, the whole question of which telecommunication services are basic and which are not takes on a dynamism, a complexity and an urgency never before known. The Commission needs to develop a process through which it can obtain and evaluate public input on an ongoing basis regarding these key decisions. As a practical matter, the current pace of development in this area is such that any decision the Commission makes today regarding the apportionment of telecommunication services is likely to have little or no meaning two or three years from now.

COMMENT 5 (re para. 43)

The Commission asks for comment on whether its definition of basic services and the definition of telecommunications services contained in the 1996 Act cover the same set of services. As indicated in Comment 4(a) above, we believe they do not.

Timing and what may be described as the proliferation of terminology complicate this question. The timing issue relates to the close proximity between enactment of Sec. 255 and the Commission's reclassification of various services. It is not clear how much time or

opportunity either party, Congress or the Commission, had to study the intentions of the other, or to examine the implications of the other's actions.

The terminology issue arises from the many similar terms that have been used in the services discussion. Used with varying degrees of precision, Congress, the Commission and the public now have such terms as "telecommunications" services, "basic" telecommunications services, "adjunct-to-basic" telecommunications services, "enhanced" telecommunications services, and "information" services to reckon with. Given the ambiguity and overlap, it is difficult to speak with confidence about whether Congress and the Commission in fact have always meant the same thing when they used similar words.

Since the Commission is reviewing the matter, this is a good time to resolve any discrepancies. If the Commission believes that Congress really did intend to dramatically circumscribe the scope of telecommunications services that would be subject to accessibility requirements, the Commission should put squarely before Congress the harmfulness and counterproductivity of such an approach. It will then be up to Congress to decide what to do.

COMMENT 6 (re paras. 44-46)

We agree with the Commission's interpretation of the term "provider" of telecommunications services. Application of Sec. 255^c to all entities providing telecommunications services to the public represents the only viable strategy for implementing this provision of the law.

Aggregators, resellers and others who do not themselves design the service may claim that they lack capacity to guarantee its accessibility. But the objects of the law would be frustrated if its coverage were limited to the entities that originate the service.

If resellers and other entities were allowed to avoid the obligations of the law, the result would be the creation of a contracts exception to the law, under which those who provide services to the public, which they had obtained by contract from others, could claim an unjustifiable exemption from the law. The Commission is correct in taking steps to prevent this from happening, and to prevent a huge loophole from being opened in the law.

The Commission also asks how telecommunications services providers which provide both covered and non-covered services should be treated. Using the example of local exchange companies (LEC's) that provide both covered telecommunications and non-covered cable services, the Commission asks what accessibility requirements should be imposed on such entities.

By way of answer the Commission proposes to require such entities to provide accessibility to the extent that their services are covered. But the Commission goes on to

express concern that requiring a company's offerings to be partially accessible might raise practical problems.

We recognize that such an approach may present practical difficulties in some cases, but what are the alternatives? Such entities can hardly expect to be exempted from accessibility requirements in their entirety. If that were permitted, telecommunications service providers could escape accessibility obligations simply by adding some non-telecommunications services or some non-basic telecommunications services to their offerings. By the same token, such entities cannot be required to make their non-covered services accessible, just because they also provide covered services. (Compare NPRM para. 52.)

However, if telecommunications service providers find the partial accessibility requirement impractical or onerous, they could always voluntarily pursue complete accessibility of all their services. There is nothing in the law to prevent that. In some situations, full accessibility may prove cheaper and easier to achieve than partial accessibility would.

COMMENT 7 (re paras. 47-49)

The Commission seeks comment on the definitions of "equipment" that it proposes to use. Given the long and settled use of the key terms involved here, and given their clear definition in the Telecommunications Act, the process of defining the "telecommunications" and "CPE" equipment covered by Sec. 255(b) should be straightforward. But the Commission itself subsequently introduces confusion into the analysis by adopting a novel stance on the definition of what software is "integral" to the operation of CPE (paras. 54-56). We discuss this issue in the next comment.

COMMENT 8 (re paras. 54-56)

The Commission takes the position that software which is not "bundled" with CPE is not covered by Sec. 255. Thus, to the extent that any inaccessibility of CPE is attributable to such software, such inaccessibility will not be covered by the law.

NCD believes that the Commission is mistaken in adopting this view. We further believe that the probable goals underlying the Commission's proactive creation of this exception to the law's coverage could be more than adequately served through far less drastic measures.

In its analysis of the coverage of software under Sec. 255(b), the Commission begins, as the Access Board's guidelines do, by addressing the issue of "functionality." If the functionality of telecommunications equipment or CPE is the issue in determining a device's accessibility, then distinctions among hardware, firmware and software are pointless. If any

major functions of equipment are not accessible, it matters little whether the hardware, the firmware, the software or some combination of all three is the cause.

Based on the wording of the statute-which includes "software and upgrades" in the definition of telecommunications equipment but omits these words from the parallel definition of CPE--the Commission reaches some interesting and novel conclusions. It follows the logic of the functionality-based analysis with respect to telecommunications equipment. Accordingly, the NPRM makes no suggestion that inaccessibility of telecommunications equipment could be overlooked or excused where the inaccessibility was attributable to software, whether "bundled" or added.

But when it comes to CPE, the Commission adopts a very different standard, one which if the Commission's tentative conclusions are not modified is all too likely to vitiate the intent and efficacy of Sec. 255(b), so far as CPE is concerned.

The Commission recognizes that software which is "integral" to CPE cannot be eliminated from the accessibility equation. But the Commission, departing significantly from the Access Board guidelines, excludes third-party software used with CPE from the coverage of the law. By excluding non-bundled software from the accessibility equation, it creates a disturbing new definition of what "integral" means.

From the functionality standpoint, it hardly matters to the CPE user whether software was sold with the CPE, or was purchased later, from a different source, at the election of the user, for use with the CPE. There is nothing in the law to suggest that some causes of dys-functionality warrant the law's concern, while others do not. As we have noted, the Commission places great weight on the differences between the statutory definitions of telecommunications equipment and CPE. But if that distinction were pivotal, why would any software used to control the functionality of CPE be subject to the law? If the law, as the Commission pointedly reminds us, excludes software and upgrades from its definition of CPE, why would "bundled" software, anymore than non-bundled software, be covered?

The most likely answer can be found in the single word "control". (Compare NPRM paras. 77 and 79.) Manufacturers or assemblers have control over what software is bundled (sold) with their CPE, so can legitimately be held responsible for the functionality of that software. But, at least under the Commission's theory of the matter, they have no control over what third-party software people subsequently buy, and hence, cannot fairly or practicably be held responsible for the functionality of such third-party products.

Assuming for purposes of argument that this analysis is factually correct, it still does not follow that the Commission needs or is authorized to create a third-party software exception to Sec. 255. And even if the Commission is free to do this, why would it want to? Why would the "readily achievable" defense not suffice to cover the case? What would be the harm if, when faced with inaccessibility problems due to third-party software, a CPE

manufacturer were asked to assess whether a readily-achievable solution could be found? If one does exist, so much to the good. If one doesn't, the user can look into other software.

Under the Commission's tentative rule, this conversation need never occur. CPE manufacturers and third-party software designers alike need not be bothered with even that minimally burdensome investigation. When queried about the accessibility of third-party software, CPE manufacturers might have said "we'll look into it." Now, thanks to this proposed rule, they can simply say, "it's no concern of ours."

A variety of converging circumstances suggest that less and less of the software needed to operate CPE will be "bundled" with it. We will discuss here only the two most important of these. First, recent developments in anti-trust law enforcement suggest that the Department of Justice may regard bundling of hardware and software unfavorably. This being so, the Commission should make clear whether it will regard software as "bundled" and therefore "integral" or as third-party-provided, when hardware purchasers are given a choice by the manufacturer as to which of several software packages or operating systems they wish to buy with their equipment. Will all the available configurations that the manufacturer could potentially include be regarded as "integral?"

The second major trend effecting bundling is the move toward network-based control of CPE. More and more, the software that runs CPE and controls CPE functionality is resident on network servers. How does the Commission propose to categorize this software? Is it integral or is it third-party? Is it perhaps a component of telecommunications service?

If it is deemed third-party software, and therefore not covered by the law, there is every reason to believe that, with the passage of time, CPE will become less and less accessible, less and less usable. And the law may have nothing to say about it.

Of course, if the Commission really means that third-party CPE software is not even subject to the Act, then standing idly by is exactly what the law must do.

If the Commission continues to believe that third-party CPE software is not subject to Sec. 255(b) protections, we again urge it to join with the disability community and with those equipment manufacturers and vendors who would be harmed by this interpretation to ask Congress, without delay, for remedial amendments to the law.

Both industry and the disability community (e.g., n118) point out that the line between hardware, firmware, machine-resident software and network-based software is becoming ever-more blurred. Under these circumstances, it ill-behooves the Commission to promote unproductive and unneeded fragmentation, and to unwittingly encourage the creation of gaps in the legal coverage of a system that is becoming increasingly seamless and interdependent. In this light it is also worth mentioning that strategies exist whereby the designers of software can make their offerings more accessible, irrespective of what hardware the software will be

used with. Rather than discouraging the pursuit of these strategies by the software community, as this exemption will do, the Commission would far better serve the objectives of Sec. 255 by encouraging these individuals and companies, to the extent readily achievable, to take accessibility into account in the design, development and manufacture of their products.

A final point on software coverage is that a software package itself may be a telecommunications product. A "soft-phone" program can turn a computer into a telephone. Most future pocket computers are expected to include this capability. Therefore, responsibility for the accessibility of such products should be deliberately addressed.

COMMENT 9 (re para. 61)

The Commission recognizes that there may be entities, such as retailers or wholesalers, who have responsibilities under Sec. 255, but who do not easily fall within the definition of "manufacturer" or "assembler" (NPRM paras. 58-60) that the Commission proposes to use. Accordingly, the Commission seeks comment on whether such entities, with responsibility for customer support or for other activities covered by Sec. 255, should be treated as if they were manufacturers. In the alternative, should the manufacturers or final assemblers with whom such intermediaries work be made to bear special responsibilities for the conduct of these entities.

It is crucial that these entities be effectively covered. Without adequate customer support for accessibility, without accessible documentation, and without the other vital functions performed by many retailers, including those not affiliated with manufacturers or assemblers, the goals of Sec. 255 would be severely blunted.

NCD recommends that such entities be treated as agents of the manufacturer, according to the established precepts of both the law of agency and the law of contracts. As such, they should be independently responsible for their compliance with the law, but the manufacturer should be jointly responsible as well. The Commission should never permit the development of a situation where a manufacturer/assembler and its agent/contractor can attempt to shift the focus off accessibility by blaming each other for a failure to provide it.

The Commission has chosen to use the term "accessibility" expansively, so as to include "usability" (NPRM para. 73). We believe this may be an instance in which specific reference to the obligations associated with "usability" is in order. Consequently, we urge the Commission to make clear that failure to provide accessible documentation or customer support will be regarded as violations in their own right of Sec. 255. One can hardly imagine any class of violations more easily avoidable by anyone wishing to comply with the law.

COMMENT 10 (re paras. 62-66)

With respect to the interpretation of the provisions of Sec. 251(a)(2) of the Act, we agree with the Commission's approach. As such, we share the view that transparency is desirable, but recognize that it will not always be attainable. The Commission's analysis leaves us with one question though. The Commission seeks to establish parameters to clarify this provision of the law which bars the installation by carriers of network features, functions and capabilities that violate the standards and guidelines established under Sec. 255. The statute does not define "network features, functions and capabilities," but only offers a list of what are called "network elements" (n137). Based on this list, the Commission's analysis appears to deal almost exclusively with equipment-related issues.

Our question therefore is whether the Commission believes that Sec. 251(a)(2) extends to software used in, or installed on, a network that may have an adverse impact upon accessibility. The key words regarding network elements ("a facility or equipment used in the provision of a telecommunications service...") admittedly imply that the only barriers in issue are equipment-based ones. If the Commission believes that software-based barriers are not covered by Sec. 251(a)(2), we would request that it make its views known. If on the other hand, it believes that software installations that impede accessibility of the telecommunications service system could also violate Sec. 251(a)(2), further discussion of that possibility would likewise be extremely helpful. We strongly believe the latter interpretation to be the correct one. Network "features", "functions" and "capabilities" are the end result of hardware and software decisions. To argue that only the hardware-based decisions are reached by Sec. 251(a)(2) would make a mockery of that section.

COMMENT 11 (re paras. 75-76)

NCD strongly endorses the Commission's adoption of the Access Board's definition of accessibility, and of the related appendix materials. We also heartily support the Commission's decision to use the Board's definitional framework to evaluate the accessibility of customer support services and of telecommunications service.

Because the Access Board characterized its appendix as advisory, we would appreciate some clarification by the Commission as to what adoption of the appendix means. We assume the Commission, like the Board, plans to treat the appendix as advisory, containing valuable and informative illustrations rather than specific requirements. We think the Commission should adopt the exact same stance toward the Appendix as the Access Board does and should make clear its intention to apply the examples in the Appendix to both the equipment and the services context.

COMMENT 12 (re para. 90)

NCD strongly objects to the methods proposed by the Commission for determining what equipment is "commonly used." We respect and share the Commission's desire to make industry aware of its compatibility obligations while ensuring a satisfactory level of consumer choice in the selection of peripheral devices, but we believe the approach proposed here would do more harm than good. The approach here suggested may reduce uncertainty for industry, but it will replace that uncertainty with arbitrariness for all those concerned in the process.

The Commission tentatively proposes two standards for determining whether a peripheral device is "commonly used" for access, and thus, whether CPE that is not directly accessible must be compatible with it. The first of these proposed tests involves the use of a rebuttable presumption. Under this presumption, devices that are included in state equipment distribution programs for people with disabilities would initially be considered to meet the test for being "commonly used." The Commission does not indicate what evidentiary showing on the part of the manufacturer would suffice to rebut this presumption. If such a presumption is to be used, it ought to be nonrebuttable.

But the problems with this first test go deeper than this. For one thing, we do not know exactly what equipment distribution programs the Commission has in mind. Most likely the Commission is referring to the telecommunications equipment distribution programs for "the disabled," that operate, most often with funds raised by a surcharge on telephone lines, in over half the states. The California Deaf and Disabled telecommunications program is perhaps the largest and best-known of these state-based efforts.

But you couldn't get any useful list by referring to the practices of these programs. Many of them limit eligibility to people with hearing or speech disabilities, so would yield no roster of access peripherals for people with other disabilities. Many do not individualize their procurement, or provide a broad selection of devices, but instead either limit purchases to the products of particular manufacturers, or authorize only one device or model of device for each particular category of need. Finally, those programs that do individualize or customize equipment selection do not necessarily maintain a priori lists of what they will buy, but make those decisions based on the particulars of each case. Some programs utilize per capita or per-device-type funding caps.

The other major problem with the use of this or any other list is that no matter how much the Commission might seek to prevent it, items not on the list, or not yet on the list, would be placed at a terrible competitive disadvantage. The list would inevitably become a de facto standard. Manufacturers of CPE would have less reason and less incentive to learn about developments in access technology. Innovative developers of new access technology would have one more hurdle to surmount.

But the Commission also proposes a second test for determining whether peripheral devices are "commonly used" by people with disabilities to obtain telecommunications access. This second proposed test (presumably offered to supplement the first) is whether the device in question is "affordable and widely available."

We have no idea what "affordable" means. Affordable to whom? If someone succeeds in acquiring a particular device, whether it was obtained with their own resources or with third-party funding, it is by definition affordable, at least to the person trying to use it. Under the affordability standard, would a manufacturer be able to argue that because the device would not have been affordable to a less fortunate person, the device cannot be deemed a "commonly used" one for purposes of the law's compatibility requirements? Surely the Commission will not adopt a standard countenancing such an absurd result.

"Widely available" also presents serious problems. We cannot imagine how this term can be operationalized, applied objectively, or applied at all to the tiny, thinly spread market for each category of device.

We recommend that the Commission adopt the Access Board's analysis of the issue (NPRM paras. 182-184). We believe that this would adequately resolve the Commission's concerns, and would yield the appropriate balance of predictability for industry and choice for consumers. Failing that, if a further definition of "commonly used" remains needed, we suggest adoption of what we will call a "due diligence" test. Under this approach, if the device is designed, marketed or used for telecommunications access, and if a manufacturer of CPE could with reasonable efforts have known of its existence, then it should be considered "commonly used" for purposes of Sec. 255(d).

COMMENT 13 (re paras. 94-123)

Few issues surrounding the implementation of Sec. 255 have attracted more attention than that of how the "readily achievable" standard, as developed under the ADA, is to be applied to telecommunications accessibility. As the Commission notes, wide agreement exists among commenters from both the disability and industry communities that telecommunications presents different and distinct issues. Accordingly, we agree with the Commission that the literal wording of the readily-achievable provision must be a starting point for the necessary analysis and exploration (NPRM paras. 97-98).

In any attempt to apply readily-achievable, whether in the telecommunications or the building-design setting, there are two principle issues: What factors should be considered; and How should such factors be evaluated and weighted? Most of the Commission's discussion deals with the first of these questions, what factors are appropriate for consideration in the telecommunications context? It is one thing to identify a factor that needs to be taken into account in determining whether a feature or an action is readily achievable.

It is quite another thing to assign a value, a precise weight, or a relative priority to any such factor. Thus, it is easy to say that an action will not be deemed readily achievable if it is too expensive to accomplish. But until and unless the question is answered how much expense is too much, a substantial degree of uncertainty must necessarily persist.

In concentrating on the identification and description of factors to be considered, the Commission is attempting to establish a framework to guide industry and consumers, and to assist itself in applying these criteria to the resolution of disputes that will arise under Sec. 255.

We support this overall approach, but do need to express some concerns regarding the details of the Commission's implementation strategy. Our questions relate to six basic areas, which are addressed in subcomments (a) through (g) below.

SUBCOMMENT (a) TRACKING THE MEANING OF READILY ACHIEVABLE

If the ADA definition of readily achievable is to be used as the starting point for the Commission's deliberations, it is vital that all sources of insight into the term's meaning be fully explored. When Congress incorporated the readily-achievable standard of the ADA into Sec. 255(a)(2) of the Telecommunications Act, it did so with presumptive knowledge of the administrative and judicial interpretations of the provision made between the time of its adoption in 1990 and the time of its incorporation into the telecommunications Act. Accordingly, our first key question must therefore be: As of the date of enactment of Sec. 255, were there any court decisions interpreting readily-achievable that bear on its meaning or application here? If so, does the Commission believe that readily-achievable was inserted into the Telecommunications Act subject to such decisions? We urge the Commission in the event it has not already done so, to review the case law under Sec. 301(9) of the ADA, in order to determine whether there are any judicial interpretations bearing upon the application of readily-achievable in the telecommunications setting. It may be that one or more of the factors the Commission proposes to add has been held inappropriate. It may be that additional factors and nuances, which may be of interest, have been added. And it may be that from the ADA standpoint, readily-achievable still means exactly what it did, and still functions exactly as it did when the department of Justice defined it in 1991.

SUBCOMMENT (b) TELECOMMUNICATIONS-SPECIFIC FACTORS

The Commission asserts the need to add "telecommunications-specific" factors to the basic four ADA factors to be taken into account in determining ready-achievability. We agree that such factors should be added, but we question the definition of telecommunications-specificity the Commission has adopted. We also have serious concerns about some of the factors the Commission has identified through use of these criteria.

The Commission never articulates its criteria for what makes a factor telecommunications-specific. But a number of the factors it adds, particularly in relation to cost and practicality, do not appear to be unique or specific to telecommunications in any way. Unless the Commission believes that concern about an issue by the telecommunications industry is enough to make that issue telecommunications-specific, there appears to be little basis for considering many of these added factors as having any special relevance here.

For example, take the added factor (NPRM para. 106) of "the degree to which the provider would recover the incremental cost of the accessibility feature." (See also para. 116.) Assuming that telecommunications-specificity is the test by which the appropriateness of proposed added factors is to be judged, what is there about cost recovery that makes it more germane or more specific to the telecommunications industry than it is to, say, the restaurant industry?

Let us examine the example of a hypothetical restaurant to clarify this point. Let us suppose that a restaurant resisted removing physical barriers to access by arguing that it was a very unappetizing restaurant, with few customers, and therefore unlikely to quickly, if ever, recover its barrier removal costs. In the ADA context, that argument would be given short shrift.

Historically, the telecommunications industry has doubted there was a market for accessible equipment and services. Many believe they are wrong, and see encouraging signs that this opinion is being reassessed. But until very recently that was their opinion. Had they believed otherwise, they would have provided accessible products. Had they recognized that there was a market, the need for Section 255 may not have been as pronounced.

Cost recovery has not been a valid consideration under the ADA, and it should not be a valid consideration here. Of course, a barrier removal would not have been considered readily achievable if it was unduly costly in light of the restaurant's financial resources and in light of the other basic ADA factors. But cost recovery time frame would not normally be one of the factors taken into the ADA decision making mix.

Obviously, restaurants care about cost recovery, just as much as telecommunications companies do. They would no doubt like to be able to argue that they shouldn't have to remove barriers, unless some increase in business is likely to result. Accordingly, we urge the Commission to explain what criteria it deems appropriate to use in deciding what factors, and what concerns, are telecommunications-specific, or even telecommunications-related in any meaningful way. Only when the Commission's definition of "telecommunications-specific" is more fully understood can its choice of factors be adequately evaluated.

We strongly urge the Commission to omit any notion of cost recovery from its list of factors to be considered. Although the Commission has considerable experience and expertise

in dealing with cost recovery in the rate setting context, application of this concept to the manufacture of equipment presents totally new and unprecedented issues. Such extension of the cost recovery concept also represents a radical new intrusion into the operations of the manufacturing sector.

Even if cost recovery were deemed telecommunications-specific, or "tailored to the circumstances" of telecommunications, and even if the Commission is disposed to implement so large an extension of its power to inquire into the activities of equipment manufacturers, application of the cost-recovery concept here would still present enormous practical difficulties. The time required for cost recovery depends upon many factors including a company's strategy for operating in a particular market. There is no direct correlation between a product's development costs and a manufacturer's pricing strategy for that product. Sometimes a company is eager to charge a price that will recover development costs while in other cases it may be thought prudent by the manufacturer to pass some of those costs down the line and incorporate them into the amounts charged for less price-sensitive products. So if the Commission is going to utilize cost recovery in the readily achievable equation, it is going to have to find out how manufacturers make these decisions. It is also going to have to decide how long a recovery period is too long. The Commission is not equipped to do this and industry surely does not want it to.

SUBCOMMENT (c) IMPLICATION OF NEW FACTORS

Even if we assume that the new factors proposed by the Commission for use in making the readily-achievable assessment are telecommunications-specific, a number of these new factors appear to reflect some disturbing assumptions. For instance, the introduction of "opportunity costs" (NPRM para. 104) brings a highly subjective element into play. Although the Commission does seek comment (para. 105) on "expeditious" means by which factual disputes can be resolved, the opportunity costs concept is by its nature so subjective that the Commission and the public will be almost totally dependent on the manufacturer or service provider for estimates of the level and nature of such costs. The issue is not one of how to settle disputed facts because as a practical matter, there will typically be no facts to dispute. The issue is not false assertions or claims either, for opportunity costs are real if one chooses or is willing to incur them.

If an equipment manufacturer or service provider does not believe that good accessibility is good business, then every penny spent on it represents an opportunity cost. We urge the Commission not to introduce this vague and ill-defined concept.

Another problem with a factor like opportunity costs is that, without well-designed safeguards and objective means of verification, its use tends to reward inefficiency and unimaginativeness in the deployment and allocation of resources. Faced with increasing demands upon its resources, one company may respond by hiring more people or by

investing in productivity technology. Another may find ways to use its personnel and other resources more efficiently. And still a third may throw up its hands and tell the Commission that meeting accessibility requirements will necessitate the sacrifice of too much else. Does it matter which of these responses a covered manufacturer or service provider chooses?

The Commission has stated (para. 95) that it wishes to implement readily-achievable "in a way that will take advantage of market and technological developments, without constraining competitive innovation." This aspiration is commendable and should be supported in every possible way. The danger is that introduction of factors like opportunity costs, as well as some of the others here proposed, may inadvertently undermine this goal by giving easy and unchallengeable excuses to those who, for whatever reason, may be all too willing to take them.

SUBCOMMENT (D) FEASIBILITY

In our view, feasibility is a highly appropriate and telecommunications-specific factor. But we do have concerns regarding how the Commission proposes to define it.

In its discussion of feasibility the Commission (paras. 102-103) does not address the uniquely telecommunications specific issue of timing. In many cases, accessibility features that would have been feasible at an early point in the product/service development process cease to be readily-achievable at a later stage. For this reason, the Commission should make clear that no claim of non-feasibility, and for that matter no claim of excessive difficulty or cost, or of impracticability, will be entertained or allowed as a defense if the problem could have been avoided by incorporation of accessibility considerations into the design, development and fabrication processes at an earlier point. While the Commission is to be applauded for taking a number of steps, throughout the NPRM, to encourage just such early and integrated accessibility planning, the failure to mention the subject here is a grave omission.

What we are concerned with here is not the timing issue raised in para. 120. Hence, we are not talking about the problems arising from the availability of new access solutions at later points in the life cycle of a product than were available when it was designed. Rather, what we are concerned about here is a situation where the difficulties or costs of access are substantial and real, but where the manufacturer or service provider could reasonably have avoided those costs or difficulties by implementing available access strategies at an earlier point.

Among the illustrative reasons listed by the Commission for why an accessibility feature might not be feasible, one is "legal impediments." We are curious what the Commission has in mind. One possibility that suggests itself is the inability to gain rights or licenses to use

various equipment items or software. Another might be provisions of contracts that were entered into prior to adoption of Sec. 255.

These or other impediments may of course exist, and there may be nothing that can be done about them. But the Commission should make clear that a claim of non-feasibility by reason of legal impediment will not be looked on favorably unless the entity making the claim can demonstrate that it has taken all readily-achievable steps to remove the impediment. By failing to include this stipulation, the Commission runs the risk of rewarding, not innovation, but passivity and indifference.

A final issue is pointed up by one of the other examples given by the Commission of reasons why an accessibility feature might not be feasible. This example is where "implementing accessibility for one disability" might "limit the ability to address accessibility" for another disability (para. 101).

We recognize that this issue of "conflicting accommodations" is a bona fide and important concern. But we question the wisdom of dealing with it in the readily-achievable context. It is dealt with elsewhere. The problem is compounded by the reiteration of this same issue in the opportunity cost context (para. 104), and yet again in another related context soon thereafter (para. 112).

SUBCOMMENT (e) MARKET FACTORS

We believe that the Commission's analysis of market factors (para. 115 et seq.) is undermined by one serious omission. Given the importance the Commission attaches to market considerations in the determination of ready-achievability, it is vital that attention be paid to the accounting practices used by companies in this setting.

Different accounting practices will yield differing results. No question of bad faith or manipulation is involved. It is simply that entities choose to do their accounting in various ways, and that different industries tend, as a matter of history and custom, to take different approaches to the handling and characterization of many financial items. It seems to us that unless the Commission has some sense of how expenses are allocated, how contingencies of various kinds are handled, and what R&D costs are capitalized and what treated as operating expenses, to name just a few of the major issues, any meaningful comparison or broad-based assessments of the costs and benefits of accessibility will be difficult or impossible. As serious, determinations of what is readily achievable and what is not will be subjective to an alarming degree.

No one suggests that the Commission can or should prescribe what accounting practices industry should use. One company or one industry sector may choose to contract for accessibility engineering services, another to obtain them from in-house employees. One

company may decide to hire people with accessibility expertise, another to expend funds on the training of already in-place personnel. These decisions may be made on economic grounds, on the basis of the organizational culture, on the basis of the requirements of labor contracts, or on the basis of other non-economic considerations. However these decisions are made, they have profound cost, competitiveness and "bottom-line" implications. Which decisions a business makes are its own concern. They become a matter of public or Commission concern though when they become the basis for public policy decisions.

The point is do we know enough to factor those variables into our assessments of what is readily achievable and what is going on.

A common situation will serve to make this issue very concrete. Say there is a company that temporarily assigns some full-time employees to an accessibility project. It allocates their wages to the accessibility cost line based on the number of hours they devote to the project. But what does it do with their fringe benefit costs, health insurance and employer pension contributions in particular? Depending on the circumstances, it would be perfectly consistent with generally accepted accounting practices (GAAP) to also pro rate these costs, or not to. So when the company says that the labor costs of accessibility were such and such, do we know which path it has taken? Do we know whether it made its decision with driving-up or driving-down the stated costs of access in mind? Do we know if it ever even considered the issue? Do we need to know? Should we care? If the net financial implications of accessibility are a matter of legal and policy significance, how can we afford or dare not to? If important decisions about what is readily achievable are going to be made on the basis of the numbers that equipment manufacturers and service providers supply, it is absolutely vital that someone know a little bit about where those numbers come from and how they are derived.

The Commission has considerable experience dealing with accounting issues in other aspects of its work. In that light, the conspicuous absence of any reference to these issues in the context of accessibility is particularly striking.

SUBCOMMENT (f) MARKET ASSESSMENTS

The Commission places great importance on a variety of market factors. We share its belief in the wisdom and energy of the marketplace. But this deeply held belief does not necessarily tell us how market data should be interpreted or applied.

When a company estimates the market for an accessible device, will the Commission have any idea of how that estimate was arrived at? Was the estimate derived on the assumption that the accessible product, or the accessible version of a standard product, will be heavily advertised, either in a targeted way to the disability community or to the public at-large?